REMARKS

This responds to the Office Action mailed on January 25, 2006.

Claims 1, 6, 10, 16, 21, and 26 are amended, no claims are canceled, and no claims are added; as a result, claims 1-4, 6-8, 10-11, 14, 16-22, 24, and 26-27 remain pending in this application.

Information Disclosure Statement

On the 1449 Form filed on November 25, 2003, the Examiner did not initial the first listed reference (US 2002/0081770 A1). Applicant respectfully requests that the Examiner mark this reference as being considered and return the initialed copy with the next official communication. A copy of the initialed 1449 as returned by the Patent Office is enclosed with this response.

§102/§103 Rejection of the Claims

Claims 1-4, 6-8, 10-11, 14, 16-22, 24, and 26-27 were rejected under 35 USC § 102(e) as being anticipated by Dahl et al. (U.S. 2002/0130407), or in the alternative, under 35 U.S.C. 103(a) as obvious over Dahl et al. (U.S. 2002/0130407) taken with Tachikawa (Title "Assembly and Packaging", pp. 530-584, 1986). Applicant does not admit that Dahl is indeed prior art and reserves the right to swear behind this reference at a later date. Nevertheless the Applicant believes that the pending claims are distinguishable from the reference for at least the following reasons.

The rejection states that Dahl teaches "integrally forming a substantially planar heat transfer conducting layer 620 on the backside surface of the semiconductor chip 601." Dahl appears to show a heat transfer film 620 containing diamondoids. However Applicant is unable to find in Dahl integrally forming a substantially planar heat conducting layer on only a computationally intensive portion of a backside surface of the semiconductor chip.

In contrast, claim 1, as amended includes integrally forming a substantially planar heat conducting layer on only a computationally intensive portion of a backside surface of the semiconductor chip. Independent claims 6, 10, 16, 21, and 26 include similar claim recitations.

Support for the amendments can be found in the specification in general, and specifically in Figure 5, and on page 9, lines 30-31 – page 10, lines 1-3.

Because the Dahl reference does not show every element of Applicant's independent claims, a 35 USC §102(e) rejection is not supported. Further, Applicant respectfully submits that Tachikawa does not cure the rejection based on Dahl for at least the reasons outlined above. Reconsideration and withdrawal of the rejection are respectfully requested with respect to claims 1-4, 6-8, 10-11, 14, 16-22, 24, and 26-27.

Claims 1, 3-4, 6-8, 10, 16-19, and 21 were rejected under 35 USC § 102(b) as being anticipated by Anschel et al. (U.S. 4,914,551). The rejection states that Anschel teaches "integrally forming a substantially planar heat transfer conducting layer 41 on the backside of the semiconductor chip 17 (Figs 2, 1)."

Anschel appears to show diamond filled epoxy utilized as an adhesive. However Applicant is unable to find in Anschel integrally forming a substantially planar heat conducting layer on only a computationally intensive portion of a backside surface of the semiconductor chip. In contrast, claim 1, as amended includes integrally forming a substantially planar heat conducting layer on only a computationally intensive portion of a backside surface of the semiconductor chip. Independent claims 6, 10, 16, and 21 include similar claim recitations.

Because the Anschel reference does not show every element of Applicant's independent claims, a 35 USC §102(b) rejection is not supported. Reconsideration and withdrawal of the rejection are respectfully requested with respect to claims 1, 3-4, 6-8, 10, 16-19, and 21 .

§103 Rejection of the Claims

Claims 2, 11, 22, and 26 were rejected under 35 USC § 103(a) as being unpatentable over Anschel et al. (U.S. 4,914,551) taken with Bertin et al. (U.S. 6,255,899). Applicant respectfully submits that the additional reference of Bertin fails to cure the rejection based on Anschel for at least the reasons outlined above.

Because the cited references, either alone or in combination, do not show every element of Applicant's independent claims, a 35 USC §103(a) rejection is not supported by the

references. Reconsideration and withdrawal of the rejection are respectfully requested with respect to claims 2, 11, 22, and 26.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6944 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date 4-24-06

By _____
David C. Peterson
Reg. No. 47,857

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 24th day of April, 2006.

Amy Moriarty
Name

_____
Signature

IDS - 11-25-2003
10/721722

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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known	
Application Number	~~Unknown~~ 10/721722
Filing Date	Even Date Herewith
First Named Inventor	O'Connor, Michael
Group Art Unit	~~Unknown~~ 2822
Examiner Name	Unknown

Sheet 1 of 1

Attorney Docket No: 884.398US2

US PATENT DOCUMENTS

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	Filing Date If Appropriate
	US-2002/0081770 A1	06/27/2002	Watanabe, M.	438	106	04/04/2002
MT	US-3,859,180	01/07/1975	Hasty, T. E.	204	16	10/16/1972
	US-4,430,190	02/07/1984	Eilers, C., et al.	204	298	12/09/1982
	US-4,925,701	05/15/1990	Jansen, F., et al.	427	38	05/27/1988
	US-5,029,322	07/02/1991	Einzinger, J., et al.	357	41	11/10/1987
	US-5,227,662	07/13/1993	Ohno, Y., et al.	257	676	10/09/1992
	US-5,272,375	12/21/1993	Belopolsky, Y.	257	717	12/26/1991
	US-5,379,186	01/03/1995	Gold, G. E., et al.	361	706	07/06/1993
	US-5,674,758	10/07/1997	McCarthy, A. M.	437	21	06/06/1995
	US-5,854,507	12/29/1998	Miremadi, J., et al.	257	686	07/21/1998
	US-5,939,781	08/17/1999	Lacap, E. M.	257	698	09/26/1996
	US-5,955,781	09/21/1999	Joshi, R. V., et al.	257	712	01/13/1998
	US-6,242,778	06/05/2001	Marmillion, P., et al.	257	347	09/22/1998
	US-6,288,900	09/11/2001	Johnson, E. A., et al.	361	705	12/02/1999
	US-6,376,984	04/23/2002	Fernandez, A., et al.	313	530	07/29/1999
MT	US-6,411,484	06/25/2002	Tihanyi, et al.	361	103	03/24/1999

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	T[2]

OTHER DOCUMENTS – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No [1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]

EXAMINER Michael Trinh DATE CONSIDERED 6/26/05

Substitute Disclosure Statement Form (PTO-1449)

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional) [2] Applicant is to place a check mark here if English language Translation is attached